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ABSTRACT

Through the years, motor skills have been taught by having students practice motor responses as the teacher verbally cued and corrected them. This teaching strategy may work in the long run, but it costs teachers an enormous amount of unnecessary time. Verbal cues and mediation training comprise a short cut process that allows for quicker learning and longer retention of skills. The nine steps to the verbal cues and mediation training process are: (1) task analysis; (2) preparation; (3) introduction of the skill; (4) demonstration; (5) student talk-teacher (students talk teachers through the skill); (6)student talk-student (students talk other students through the skill); (7) questions; (8) practice; and (9) review. These same processes apply to other cognitive learning besides motor skill learning. Research indicates that use of the verbal cues and mediation training process increases motor and cognitive skill achievement when compared to traditional teaching of the same skills. Additional large scale research on this process needs to be completed to determine the strength and validity of the method. (CJ)

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Verbal Cues & Mediation Training: A Strategy for Teaching Motor and Cognitive Skills

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Verbal Cues & Mediation Training: A Strategy for Teaching Motor and Cognitive Skills

Do our colleges of education teach these skills to our education majors? These skills are presented here to acquaint teacher educators with their possible value in the classroom.

Verbal Cues & Mediation Training: A Strategy for Teaching Motor and Cognitive Skills

Introduction. Through the years motor skills have been taught by having students practice motor responses as the teacher verbally cues and corrects them if and when they make an error. This teaching strategy may work in the long run but costs teachers an enormous amount of unnecessary time.

Page (1976) cites a procedure used to teach pedestrian skills to retarded persons. The procedure includes four parts: 1.) task sequence, 2.) training, 3.) review sessions, and 4.) follow-up checks.(pp. 435-438) The results of the Page study indicated that after receiving classroom training on the skills each subject exhibited appropriate pedestrian skills under city traffic conditions. In addition, training in some skills appeared to facilitate performance in skills not yet trained.

In a similar study, Blackwood (1976) writes, "We don't learn motor skills in the way traditional teaching assumes. Traditional teachers assume that people learn as rats learn: if a response is prompted and reinforced in the presence of a stimulus, this stimulus eventually gains control over the response." p. 1

Verbal humans learn in a more efficient way. Many times verbal humans need only to learn to make the right verbal cues(responses) at the right time.

Verbal Cues(VC) & Mediation Training(MT): The Process.

Verbal Cues(VC) and Mediation Training(MT) comprise a short cut process that allows for quicker learning and longer retention of skills.

There are nine simple steps to the VC & MT process.

1.) Task Analysis
2.) Preparation
3.) Introduction of the Skill
4.) Demonstration
5.) Student Talk-Teacher
6.) Student Talk-Student
7.) Questions
8.) Practice
9.) Review

An Example. An example of a difficult task made simple by VC & MT is the task of folding the American flag. The following is a quick look at how the nine steps would be applied to the task.

Task Analysis.

The following are the steps needed:

1.) One person holds the flag on the short side. The other hold the other short side so the flag never touches the ground.
2.) Fold the flag in half lengthwise.
3.) Fold the flag lengthwise again, keeping the stars outside of the fold.
4.) From the end without stars, fold over to the opposite edge to form a triangle.
5.) With the flag held taut, the triangle is folded over on itself, forming another triangle.
6.) Repeated triangles are formed until the entire flag is neatly folded.
7.) The small portion of the flag left over is tucked inside the pocket formed by the triangles.

The task analysis should always be run through by the teacher before using the skill with the students

to make any necessary corrections in the procedure.

Preparation. Lay the unfolded flag flat on the table.

Introduction of the Skill. Tell the students how important the skill is for the proper care of the flag. The students should be told that the skill is easy to learn. They should also be told of the procedure that is going to be used to teach the skill.

Explain that as they listen to the teacher teach the skill they should talk to themselves and see the job being done in mental, visual images. The students should be told to anticipate each move, covertly talking and/or acting their way through the skill, while getting feedback from the demonstration, rehearsing covertly as the teacher teaches the skill.

Demonstration. The skill should be demonstrated with the help of an assistant who would be used during the checking of the task analysis. The assistant should have learned the skill through the same method. The whole chain should be demonstrated using overt verbal self-cues. At the completion of the repetition, the students should be asked if they have any questions.

Students Talk Teacher Through the Skill. One student should be chosen to talk the assistant and the teacher through the skill of folding the flag. Tell the student to talk slowly and wait after each step so the other students can covertly anticipate each new move. The other students should be told that this is a form of programmed instruction and they would get immediate feedback for each step just by watching the demonstration and covertly anticipating each move.

As the student overtly talks the teacher and assistant through the skill of flag folding, the teacher and assistant should complete the skill.

Students Talk Students Through the Skill. The same procedure should be used with the other students talking students through the skill. This should be continued until the skill is perfect.

Questions. The teacher should ask the students if they have any questions.

Practice. After the mediating links(talking through skills) are perfected the students should be allowed to demonstrate the skill while giving self-cues overtly. After completion of the skill they should be directed to attempt

Review. The students should practice the skills again. Review should be spaced close together at first and then gradually extended.

Important Implications. These same principles apply to much cognitive learning. This method can be used to teach multiplication, division, constructing an outline, writing Haiku, etc.

Research. Smith and Semple (1979) conducted a study of forty-six male and female third grade students in two public schools to determine whether use of VC & MT increased motor and cognitive skill achievement when compared to traditional teaching of the same skills.

Students were divided into two groups based on their IQ scores. The students' IQ's in the experimental group were compared with students in the control group to insure two groups with the same intelligence base. Each pair of students had IQ's within a three point range.

All of the subjects were taught three cognitive and three motor skills. The twenty-three students in the experimental group were taught using the VC & MT process and the twenty-three in the control group were taught using traditional methods.

The subjects were administered pre/post-tests on each of the six skills. Using analysis of covariance, it was found that significant differences at the .05

level favored the experimental group.

Additional large scale research on this process needs to be completed to determine the strength and validity of the method.

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